

# COOLIT 2023

## International Symposium on CO<sub>2</sub>-Lean Ironmaking Technology : Road to Green Steel

June 25 - 28, 2023

B1 Cherry Room,  
Hilton Gyeongju, Korea

### Symposium Program

*\* English is an official language.*

*\* All the time shown in the program is based on KST UTC+09:00 hours.*

Day 0 - SUNDAY, June 25 / Hilton Gyeongju 1F Pine Room	
17:30-18:30	Welcome Function
Day 1 - MONDAY, June 26 / Hilton Gyeongju B1 Cherry Room	
08:00-17:00	Registration Open
Opening	
09:00-09:30	Opening Ceremony
09:30-09:50	<b>Towards Low-GHG Emissions from Energy Use in Iron &amp; Steel Sector</b> Woong-Seong Chang (Office of Strategic R&D Planning, Korea)
09:50-10:00	Photo
Session 1. Session Chair : Sang-Ho Yi (POSCO, POSTECH)	
10:00-10:35	<b>Technological Approach to Carbon Neutrality in Korea's Steel Industry</b> Dong Joon Min (Yonsei University, Korea)
10:35-11:10	<b>JFE Steel's Initiatives toward Carbon Neutrality and the Challenges of Steelmaking Technology in the Carbon Neutral Steelmaking Process</b> Yasuo Kishimoto (JFE Steel Corporation, Japan)
11:10-11:45	<b>Efficiency Increase &amp; Technological Innovation: Accelerate the Development of a New Pattern of Low-carbon Green Ironmaking</b> Jianliang Zhang (University of Science and Technology Beijing, China)
11:45-11:50	Summary & Discussion
11:50-13:30	<b>Luncheon / 1F Grand Ballroom (Supported by posco)</b>
Session 2. Session Chair : Joo Hyun Park (Hanyang University)	
13:30-14:05	<b>Lower Emissions Steel Production: Challenges to Overcome through R&amp;D</b> Paul Zulli (University of Wollongong, Australia)
14:05-14:40	<b>Demonstrating Pathways to a Green End State: BHP's Steel Decarbonisation Program</b> Nigel Tame (BHP, Australia)
14:40-15:15	<b>Ferronickel and Iron Production with Low CO<sub>2</sub> Emissions</b> Zulfadi Zulhan (Institut Teknologi Bandung, Indonesia)
15:15-15:20	Summary & Discussion
15:20-15:40	<b>Coffee Break / B1</b>
Session 3. Session Chair : Sung-Mo Jung (POSTECH)	
15:40-16:15	<b>The Research Progress of HyCROF</b> Junjie Sun (Baowu Steel, China)
16:15-16:50	<b>Strategy for Carbon Neutrality in the KOBELCO Group</b> Mitsuru Sakamoto (KOBELCO STEEL, LTD., Japan)
16:50-17:25	<b>Ironmaking Using Raw Sustainable Biomass and Microwave Energy</b> David Leigh (Rio Tinto, Australia)
17:25-17:30	Summary & Discussion
18:00-	<b>Banquet / 1F Grand Ballroom (Supported by KIM+ THE KOREAN INSTITUTE OF METALS AND MATERIALS)</b>

Day 2 - TUESDAY, June 27 / Hilton Gyeongju B1 Cherry Room	
08:00-17:00	Registration Open
Session 4. Session Chair : Youn-Bae Kang (POSTECH)	
09:00-09:35	<b>Electric Smelting Furnace for Alternative Hot Metal Production from Australian Iron Ores</b> Tom Honeyands (Newcastle University, Australia)
09:35-10:10	<b>Hyundai Steel's Pathway to Green Steel: Developing a Flexible and Hybrid Production System through Innovative Technologies</b> Hyeong Jin Kim (Hyundai Steel Company, Korea)
10:10-10:15	Summary & Discussion
10:15-10:35	<b>Coffee Break / B1</b>
10:35-11:10	<b>Refining Process and Slag Properties for Green Steel</b> Shigeru Ueda (Tohoku University, Japan)
11:10-11:45	<b>Challenges in Electric Steelmaking Technology for Reduction of CO<sub>2</sub> Emissions</b> Joo Hyun Park (Hanyang University, Korea)
11:45-11:50	Summary & Discussion
11:50-13:30	<b>Luncheon / 1F Grand Ballroom (Supported by HYUNDAI STEEL)</b>
Session 5. Session Chair : In-Ho Jung (Seoul National University)	
13:30-14:05	<b>Reaction Challenges in Hydrogen Reduction</b> P. Chris Pistorius (Carnegie Mellon University, USA)
14:05-14:40	<b>Update on the Development of Hydrogen-based Ironmaking Process at POSCO</b> Myoung-Gyun Shin (POSCO, Korea)
14:40-15:15	<b>Evaluation of Iron Ore Fines for Hydrogen Reduction in Fluidized Bed</b> Shoji Ushio (Nippon Steel Corporation, Japan)
15:15-15:20	Summary & Discussion
15:20-15:40	<b>Coffee Break / B1</b>
Session 6. Session Chair : Youngjo Kang (Dong-A University)	
15:40-16:15	<b>Recent Progress and Prospect of Low-carbon and Hydrogen Metallurgy in Chinese Steel Industry</b> Jian Pan (Central South University, China)
16:15-16:50	<b>Critical Perspectives in the Utilization of H-DRI from Ironmaking to Steelmaking : Following Our Dream</b> Il Sohn (Yonsei University, Korea)
16:50-17:25	<b>Technological Pathway of Ore Reduction by H<sub>2</sub> toward Carbon Neutral Steel Production in 2050</b> Sung-Mo Jung (POSTECH, Korea)
17:25-17:30	Summary & Discussion
17:30-17:40	Closing Address
Day 3 - WEDNESDAY, June 28 / POSTECH, POSCO (Pohang)	
09:00-11:30	POSTECH Campus Tour (CHANGeUP GROUND : Venture Nurturing Building of POSCO, PAL(Pohang Accelerator Laboratory))
12:00-13:00	<b>Luncheon / POSCO (Supported by posco)</b>
13:00-16:00	POSCO Tour (Park1538, FINEX Plant)

### Registration for COOLIT 2023

All Participants of COOLIT 2023 except invited speakers are required to register in advance.

Regular	Student
KRW 200,000	KRW 100,000



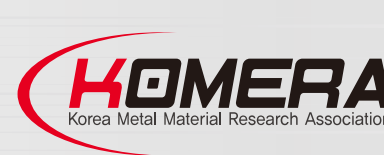
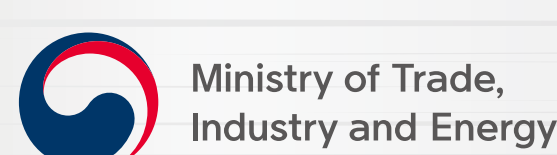
Website → Registration

Hosted by **Graduate Institute of Ferrous & Energy Materials Technology (GIFT)**

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